

CLAIMS

1. A fallback telecommunications device comprised of:

A microprocessor utilized to perform a predetermined operation and processing of a predetermined input signal and then output a corresponding signal.

5 A minimum of one relay circuit that has an amplifier circuit and a relay; the input terminal of the said amplifier circuit is connected to the said microprocessor and its output terminal is connected to the signal input terminal of the said relay; the terminal at the first side of the said relay is connected to the telephone line tip/ring terminal and the terminal at the second side of the said relay is connected

10 to the Public Services Telephone Network (PSTN) tip/ring terminal of the said microprocessor; as such, the telephone line tip/ring terminal is connected to the PSTN tip/ring terminal, but when the said relay is controlled into operation, the connection is switched to the Voice Over Internet Protocol (VOIP) tip/ring terminal of the said microprocessor; in other words, the connection of the

15 telephone line tip/ring terminal is switched to the VOIP tip/ring terminal of the said microprocessor.

An off-hook detection circuit connected to the said PSTN tip/ring terminal as well as a ring detection terminal of the said microprocessor that is utilized to ascertain telephone off-hook status and, furthermore, send a signal to the said ring

detection terminal.

A dummy load circuit connected to the tip terminal and the ring terminal of the said PSTN.

2. As mentioned in Claim 1 of the fallback telecommunications device of
5 the invention herein, the present invention is also comprised of a manual switch
that connects the telephone line circuit tip and ring terminals to the PSTN tip and
ring terminals as well as the VOIP tip and ring terminals and which is utilized to
provide the user optional manual toggling of the telephone line circuit connections
between the PSTN terminals and the VOIP terminals.

10 3. As mentioned in Claim 1 of the fallback telecommunications device of
the invention herein, the said dummy load circuit consists of a full-wave bridge
rectifier circuit and a relay; one end of the said full-wave bridge rectifier circuit is
connected to the ring terminal of the said PSTN and its other end is connected to
the shunt terminal at one side of the said relay, while the shunt terminal at the other
15 side of the said relay is connected to the PSTN tip terminal and the signal input
terminal of the said relay is connected to the said microprocessor which controls
continuity between the said ring and tip terminals.

4. As mentioned in Claim 1 of the fallback telecommunications device of the invention herein, the said off-hook detection circuit consists of two light emitting diodes in a positive-to-negative and negative-to-positive wiring arrangement and a phototransistor.